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| APPLICATION NO.                     | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/781,971                          | 02/19/2004  | Alexander M. Arayata | END920020009US2     | 4419             |
| 23550                               | 7590        | 09/07/2005           | EXAMINER            |                  |
| HOFFMAN WARNICK & D'ALESSANDRO, LLC |             |                      | DIAZ, JOSE R        |                  |
| 75 STATE STREET                     |             |                      | ART UNIT            |                  |
| 14TH FL                             |             |                      | PAPER NUMBER        |                  |
| ALBANY, NY 12207                    |             |                      | 2815                |                  |

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                                |                                                                                    |
|------------------------------|-------------------------------|--------------------------------|------------------------------------------------------------------------------------|
| <b>Office Action Summary</b> | Application No.<br>10/781,971 | Applicant(s)<br>ARAYATA ET AL. |                                                                                    |
|                              | Examiner<br>José R. Díaz      | Art Unit<br>2815               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                              |                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/19/04</u> . | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group III, claims 16-20, in the reply filed on July 7, 2005 is acknowledged. The traversal is on the ground that search and examination of the whole application can be done without serious burden. This is not found persuasive because the invention of Group I, claims 1-9 is related to an electrical device as classified in 257/666+, the invention of Group II, claims 10-15 is related to a method of making the electrical device as classified in 438/123+, and the invention of Group III is an apparatus as classified in classified in 361/704+. They are shown to be different inventions and having a separate status in the art by their different classifications. The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regards to claim 20, it is unclear what is the section or portion that applicant is trying to claim. Further, it is noted that claim 20 fails to further limits claim 16 since the claim recites the limitation of a "support section for the second portion", which was previously recited in claim 16.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 16-18 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Chung et al. (US Pat. No. 6,677,662 B1).

Regarding claim 16, Chung et al. teaches a heater block (consider the block comprising portions 265 and 290) for use in fabricating an electronic package having a lead (230) having a first portion (consider the portion of lead 230 that is in contact with portion 290) having a thickness that is less than a second portion thereof (consider the portion of lead 230 that is in contact with portion 265) [see fig. 1], the heater block comprising:

an electronic package support section (265) for supporting the second portion [see fig. 1]; and

a raised heating section (290) for heating the first portion, the raised heating section extending above the support section to be adjacent the first portion [see fig. 1].

Regarding claim 17, Chung et al. further teaches a plurality of tiebar positioning elements (180) [see fig. 2].

Regarding claim 18, Chung et al. further teaches a die pad support section [consider the portion of block 265 that is in contact with layer 80].

Regarding claim 20, Chung et al. further teaches a support section (265) for the second portion of the lead (consider the portion of lead 230 that is in contact with portion 265).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chung et al. (US Pat. No. 6,677,662 B1) in view of Takahashi (US Pat. No. 6,454,158 B1).

Regarding claim 19, Chung et al. teaches a die paddle of the electronic package (80).

However, Chung et al. fails to teach the limitation that the die pad support section includes a vacuum opening for application of a vacuum to a die paddle of the electronic package.

Takahashi teaches that it is well known in the art to include holes (11c) in the heater block (11) for vacuum clamping of the semiconductor chip [see fig. 15].

Chung et al. and Takahashi are analogous art because they are from the same field of endeavor as applicant's invention. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include vacuum suction holes in the heater block of Chung et al. The motivation for doing so, as is taught by Takahashi, is for vacuum clamping of the semiconductor chip (col. 1, lines 50-52 and col. 2, lines

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26-30). Therefore, it would have been obvious to combine Takahashi with Chung et al. to obtain the invention of claim 19.

### ***Correspondence***

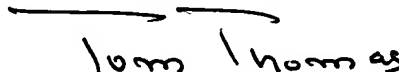
Any inquiry concerning this communication or earlier communications from the examiner should be directed to José R. Díaz whose telephone number is (571) 272-1727. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (571) 272-1664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



José R. Díaz  
Examiner  
Art Unit 2815



TOM THOMAS  
SUPERVISORY PATENT EXAMINER